UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,753	08/04/2003	Sheng-Yuan Cheng	405500	5345

27717 7590 01/30/2007	EXAMINER
SEYFARTH SHAW LLP 131 S. DEARBORN ST., SUITE2400 CHICAGO, IL 60603-5803	TOLENTINO, RODERICK

ART UNIT	PAPER NUMBER
2134	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)
Office Action Summary	10/633,753	CHENG ET AL.
	Examiner	Art Unit
	Roderick Tolentino	2134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 August 2003*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

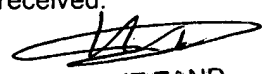8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *04 August 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

KAMBIZ ZAND
PRIMARY EXAMINER

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1 – 20 are pending.

Claim Objections

2.   Claims 1, 4, 7 and 10 are objected to because of the following informalities:

Claims use the term 'electrically' incorrectly because based on the claim

language the word that should be used in its place should be "electronically."

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

4.   Claims 1, 3, 4, 6, 7, 10, 13 and 17 are rejected under 35 U.S.C. 112, second

paragraph, as being indefinite for failing to particularly point out and distinctly claim the

subject matter which applicant regards as the invention.

5.   As per claims 1, 4, 7 and 10, limitation recites "use either the host or the

hardware encryption/decryption unit to decrypt an encrypted frame received by the data

receiving unit." It is indefinite as to how this step is performed. Once data is received it

is unclear as to what role the host plays. Is the data sent back to the host? For

purposes of examination the encryption/decryption unit will decrypt the data.

6.   Claims 3 and 6 recite the limitation "the second encryption/decryption table."

There is insufficient antecedent basis for this limitation in the claim. The claim attempts

to reference a table already spoken of. However, it is not spoken of prior hence why

there is insufficient antecedent basis. For purposes of examination it will be interpreted

to be just a table.

7.   As per claims 7, 10, 13 and 17 and their dependent claims, limitations recite a

hardware encryption/decryption unit and a programmable encryption and decryption

unit. This is unclear since hardware is known by anyone of ordinary skill in the art of, to

be programmable. Further the tables are no different in data and therefore make it seem

that the hardware can be the programmable unit as well. For purposes of examination it

will be interpreted to be the same unit.

Claim Rejections - 35 USC § 102

8.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9.   Claims 13 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by

Schier U.S. Patent No. (6,907,123).

10.   As per claim 13, Schier discloses checking whether a received frame is a

ciphertext or a plaintext, checking whether a hardware decryption unit can decrypt if the

frame is a ciphertext and decrypting the frame by the hardware decryption unit if the

hardware decryption unit can decrypt the frame, otherwise decrypting the frame by a

programmable decryption unit (Schier, Col. 4 Lines 30 – 56, teaches the checking a

message and whether or not to encrypt or decrypt the message).

11.   As per claim 14, Schier discloses the programmable decryption unit is a station,

a personal computer, a programmable logic element or an embedded system (Schier,

Col. 2 Lines 64 – 67).

Claim Rejections - 35 USC § 103

12.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

13.   Claims 1, 2, 4, 5, 7, 8, 10 and 11 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Schier U.S. Patent No. (6,907,123) in view of Kollymer et al. U.S.

Patent No. (7,165,175) and Durst, JR. et al. U.S. PG-Publication No. (2003/0093384).

14.   As per claims 1, 4, 7 and 10, Schier teaches a data receiving unit for receiving

frames, a data transmitting unit for transmitting frames (Schier, Col. 2 Lines 64 – 67), a

hardware encryption/decryption unit with a first encryption/decryption table, wherein the

hardware encryption/decryption unit is an electrical circuit fabricated according to at

least one encryption/decryption algorithm and the first encryption/decryption table

comprises a encryption/decryption algorithm identifier field and a key field for encrypting/decrypting frames (Schier, Col. 4 Lines 30 – 56), a first checking unit electrically connected to the data receiving unit and the hardware encryption/decryption unit, wherein the first checking unit chooses to use either the host or the hardware encryption/decryption unit to decrypt an encrypted frame received by the data receiving unit (Schier, Col. 4 Lines 30 – 56), but fails to teach a station identifier field in a table and a second checking unit electrically connected to the hardware encryption/decryption unit and the host, wherein the second checking unit checks whether the hardware encryption/decryption unit has to encrypt a frame that is to be encrypted or the frame has been encrypted by the host. However, in analogous arts Kollymer teaches a second checking unit electrically connected to the hardware encryption/decryption unit and the host, wherein the second checking unit checks whether the hardware encryption/decryption unit has to encrypt a frame that is to be encrypted or the frame has been encrypted by the host (Kollymer, Col. 5 Lines 27 – 31) and Durst teaches teach a station identifier field in a table (Durst, Paragraph 0059).

At the time the invention was made, it would have been obvious for a person of ordinary skill in the art to use Kollymer's system for selectively encrypting data sent over a network with Schier's secure voice communication system because it offers the advantage of properly encrypting data that needs to be encrypted and not improperly encrypting data that doesn't need to be encrypted (Kollymer, Col. 5 Lines 27 – 31).

At the time the invention was made, it would have been obvious for a person of ordinary skill in the art to use Durst's scanner enhanced remote control unit for linking

online resources with Schier's secure voice communication system because it offers the

advantage of ensuring that the proper decryption key will be used for the data from

certain sources (Durst, Paragraph 0059).

15.   As per claims 2 and 5, Schier as modified teaches the host is a station or a

personal computer (Schier, Col. 2 Lines 64 – 67).

16.   As per claims 8 and 11, Schier as modified teaches the programmable

encryption/decryption unit is consisted of a programmable logic element or an

embedded system (Schier, Col. 2 Lines 64 – 67).

17.   Claims 3, 6, 9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Schier U.S. Patent No. (6,907,123), Kollymer et al. U.S. Patent No. (7,165,175)

and Durst, JR. et al. U.S. PG-Publication No. (2003/0093384), as applied to claims 1, 4,

7 and 10 and in further view of Anglin et al. U.S. Patent No. (6,901,417).

18.   As per claims 3, 6, 9 and 12, Schier as modified fails to teach the

encryption/decryption table can be updated by a program. However, in an analogous

art Anglin teaches the encryption/decryption table can be updated by a program (Anglin,

Col. 1 Lines 66 – 67 and Col. 2 Lines 1 – 15).

At the time the invention was made, it would have been obvious to a person of

ordinary skill in the art to use Anglin's method and program for updating records in a

database with Schier's secure voice communication system because it offers the

advantage of keeping a table update with current versions to prevent corrupt or erased

data (Anglin, Col. 1 Lines 14 – 27).

19.   Claims 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schier

U.S. Patent No. (6,907,123) in view of Durst, JR. et al. U.S. PG-Publication No.

(2003/0093384).

20.   As per claim 15, Schier discloses the hardware decryption unit comprises a first

decryption table, the programmable decryption unit comprises a second decryption

table, and the first and the second decryption tables comprise at a key field for

decrypting frames (Schier, Col. 4 Lines 30 – 56), but fails to teach teach a station

identifier field in a table. However, in an analogous art Durst teaches teach a station

identifier field in a table (Durst, Paragraph 0059).

At the time the invention was made, it would have been obvious for a person of

ordinary skill in the art to use Durst's scanner enhanced remote control unit for linking

online resources with Schier's secure voice communication system because it offers the

advantage of ensuring that the proper decryption key will be used for the data from

certain sources (Durst, Paragraph 0059).

21.   Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schier

U.S. Patent No. (6,907,123) in view of Anglin et al. U.S. Patent No. (6,901,417).

22.   As per claim 16, Schier fails to teach the second encryption/decryption table can

be updated by a program. However, in an analogous art Anglin teaches the

encryption/decryption table can be updated by a program (Anglin, Col. 1 Lines 66 – 67 and Col. 2 Lines 1 – 15).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use Anglin's method and program for updating records in a database with Schier's secure voice communication system because it offers the advantage of keeping a table update with current versions to prevent corrupt or erased data (Anglin, Col. 1 Lines 14 – 27).

23. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schier U.S. Patent No. (6,907,123) in view of Kollymer et al. U.S. Patent No. (7,165,175).

24. As per claim 17, Schier teaches and encrypting the frame by the hardware encryption unit if the hardware encryption unit can encrypt the frame, otherwise encrypting the frame by a programmable decryption unit (Schier, Col. 4 Lines 14 – 29) but fails to teach checking whether to encrypt a frame before transmission, checking whether a hardware encryption unit can encrypt the frame if necessary. However, in an analogous art Kollymer teaches checking whether to encrypt a frame before transmission, checking whether a hardware encryption unit can encrypt the frame if necessary (Kollymer, Col. 5 Lines 27 – 31).

At the time the invention was made, it would have been obvious for a person of ordinary skill in the art to use Kollymer's system for selectively encrypting data sent over a network with Schier's secure voice communication system because it offers the

advantage of properly encrypting data that needs to be encrypted and not improperly encrypting data that doesn't need to be encrypted (Kollymer, Col. 5 Lines 27 – 31).

25.   As per claim 18, Schier as modified teaches the programmable decryption unit is a station, a personal computer, a programmable logic element or an embedded system (Schier, Col. 2 Lines 64 – 67).

26.   Claims 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schier U.S. Patent No. (6,907,123) and in Kollymer et al. U.S. Patent No. (7,165,175), as applied to claim 17 and in further view of Durst, JR. et al. U.S. PG-Publication No. (2003/0093384).

27.   As per claim 19, Schier discloses the hardware decryption unit comprises a first decryption table, the programmable decryption unit comprises a second decryption table, and the first and the second decryption tables comprise at a key field for decrypting frames (Schier, Col. 4 Lines 30 – 56), but fails to teach teach a station identifier field in a table. However, in an analogous art Durst teaches teach a station identifier field in a table (Durst, Paragraph 0059).

At the time the invention was made, it would have been obvious for a person of ordinary skill in the art to use Durst's scanner enhanced remote control unit for linking online resources with Schier's secure voice communication system because it offers the advantage of ensuring that the proper decryption key will be used for the data from certain sources (Durst, Paragraph 0059).

28.   Claim 20 is are rejected under 35 U.S.C. 103(a) as being unpatentable over

Schier U.S. Patent No. (6,907,123) and Kollymer et al. U.S. Patent No. (7,165,175), as

applied to claim 17 and in further view of Anglin et al. U.S. Patent No. (6,901,417).

29.   As per claim 20, Schier fails to teach the second encryption/decryption table can

be updated by a program. However, in an analogous art Anglin teaches the

encryption/decryption table can be updated by a program (Anglin, Col. 1 Lines 66 – 67

and Col. 2 Lines 1 – 15).

At the time the invention was made, it would have been obvious to a person of

ordinary skill in the art to use Anglin's method and program for updating records in a

database with Schier's secure voice communication system because it offers the

advantage of keeping a table update with current versions to prevent corrupt or erased

data (Anglin, Col. 1 Lines 14 – 27).

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Roderick Tolentino whose telephone number is (571)

272-2661. The examiner can normally be reached on 8:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kambiz Zand can be reached on (571) 272-3811. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Roderick Tolentino
Examiner
Art Unit 2134

Roderick Tolentino

KAMBIZ ZAND
PRIMARY EXAMINER